

REMARKS

Pursuant to 37 C.F.R. § 1.116, Applicants respectfully request reconsideration of the claim rejections set forth in the Office Action dated August 25, 2006.

Summary

Claims 2, 4, 6, 8, and 10 are pending
Claim 2 is currently amended
Claims 11 and 12 have been cancelled

Claim Rejections – 35 U.S.C. § 103(a)

Claims 2, 4, 6, 8, and 10 were rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over either Holden (U.S. Patent No. 2,498,737) or Scarpa (U.S. Patent No. 3,433,461).

Claim 2 recites, *inter alia*, the vibrating portion and the side wall portion are integrally formed as a box. The cited references fail to disclose the vibrating portion and the side wall portion are integrally formed as a box. In fact, the cited references teach contrary arrangements. Scarpa teaches the piezoelectric wafer (1) and the tube (7) are constituted as separate bodies (Figure 2). Holden discloses that the main housing (1, 2) and the vibratory crystals (11, 12, 13) are separate bodies (Figure 1). There is no suggestion or motivation in the cited references that the vibrating portion and the side wall portion are integrally formed as a box. Accordingly, claim 2 is allowable over the cited references.

Claim 2 is also allowable over the cited references for additional reasons, which are independent of those discussed above. Claims 2 recites, *inter alia*, the opposite side, with respect to the thin portion, of the principal surface of the vibrating portion is planar. The cited references fail to disclose or suggest the opposite side, with respect to the thin portion, of the principal surface of the vibrating portion is planar. In fact, the cited references teach contrary arrangements.

Scarpa teaches the groove (3a) is formed by the disk (2) (Figure 2 and 10). As taught by Scarpa, “[g]rooves 3a and 3b are matched on the upper and lower surfaces so that they form between them a thin annular supporting ring 4” (column 5, lines 54 – 56). In other words, the grooves 3a and 3b are presented on both sides, and neither side of the disk (2) is planar.

Holden teaches “front plate 6 is provided with two annular grooves, one on each side” (column 3, lines 58 – 60). In other words, the grooves 28 are presented on both sides of the front plate 6, and neither side of the front plate 6 is planar.

Accordingly, for at least the reasons set forth above, claim 2 is allowable over the cited references. Dependent claims 4, 6, 8, and 10 depend from allowable claim 2, so are allowable for at least these reasons.

Response to Previous Office Action

In the Office action dated August 25, 2006, the Examiner notes that the “thin portion at the border... is considered to be a mere rearrangement of parts” (page 3). The Examiner cited to MPEP 2144.04 REVERSAL, DUPLICATION OR RE-ARRANGEMENT OF PARTS for support. Applicants respectfully disagree with the Examiner. The Examiner has failed to provide a *prima facie* case of obviousness.

“The mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims on appeal is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for the worker in the art, without the benefit of the appellant’s specification, to make the necessary changes in the reference device.”

Ex parte Chicago Rawhide Mfg. Co., 223 USPQ 351, 353 (Bd. Pat. App. & Inter. 1984). Scarpa and Holden fail to provide a motivation or reason to make the changes indicated by the Examiner.

Claim 2 recites, *inter alia*, a thin portion formed at least on a part of a border between said vibrating portion and said side wall portion. Because the thin portion is formed on at least part of the border the propagated ultrasonic vibration is partly reflected by the thin portion. The cited references fail to disclose or suggest the arrangement of claim 2.

Scarpa discloses a groove (3a) between the vibrating portion (1) and the side wall (Figure 12). The groove (3a) is not formed on at least a part of a border and is thus distinguishable from the arrangement of claim 2. Holden discloses an annular groove (28) that is between main housing (1, 2) and the vibrating portion (11, 12, 13) (Figure 1).

Accordingly, claim 2 is allowable over the cited reference. Dependent claims 4, 6, 8, and 10 depend from allowable claim 2, so are allowable for at least these reasons.

Conclusion

For at least the reasons presented above, the Applicant respectfully submits that the pending claims are in condition for allowance.

The Examiner is respectfully requested to contact the undersigned in the event that a telephone interview would expedite consideration of the application.

Respectfully submitted,



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